

PACIFIC OCEAN AND SOUTH SEAS.

LETTER

FROM

THE SECRETARY OF THE NAVY,

TRANSMITTING

A report of J. N. Reynolds, in relation to islands, reefs, and shoals in the Pacific Ocean, &c.

JANUARY 27, 1835.

Referred to the Committee on Commerce.

NAVY DEPARTMENT,

January 24, 1835.

SIR: I have the honor to send herewith an original report of J. N. Reynolds, Esq., dated the 24th of September, 1828, describing certain islands, reefs, and shoals in the Pacific Ocean, &c., and which is presumed to be the report called for by the resolution of the House of Representatives of the 23d instant, and referred to as dated the 9th October, 1829. When no longer required, it is respectfully requested it may be returned.

I am, very respectfully,

Your obedient servant,

M. DICKERSON.

Hon. JOHN BELL,

Speaker of the House of Representatives.

To the Hon. SAMUEL L. SOUTHARD,
Secretary of the Navy:

SIR: In obedience to your orders of June 30, I repaired without delay to New London, Stonington, Newport, New Bedford, Edgartown, Nantucket, and other places where information might be found of the Pacific Ocean and South Seas. The whaling captains were ready to communicate such knowledge as they had treasured up or recorded in their numerous voyages. The owners of the whale ships were equally anxious

to do all in their power to assist me in the object of my visit to them. In these places the navigators are certainly better acquainted with those seas than any other people in this or in any other country can be. The information had, in some measure, been gathered in gross, but without order or much arrangement; and I had to go over the whole ground, and examine at Nantucket every individual navigator of those seas who could be found at home, with their log books, and journals and charts. The doing of this, and putting the intelligence into such form as might save you much time in reading, was a work of no trifling magnitude, which I mention only to excuse the delay of this report. It was pleasant for me to find that all I had heard before was confirmed by a long train of witnesses, and every calculation I had previously made fell far short of the truth.

The first objects of my inquiry were the navigation, geography, and topography presented by the whole range of the seas, from the Pacific to the Indian and Chinese Oceans; also, the extent and nature of our commerce and fisheries in these seas.

The whole number of vessels in the whale fishery, with those engaged in the sealing business, far exceeded the number I had given in my communication to the Naval Committee, and their tonnage was much greater. There are at least two hundred ships employed, being on an average of two hundred and seventy-five tons; some as large as five hundred, and others under two hundred tons. The average length of their voyages, taking one hundred and seventy-eight voyages, from 1815 to 1824, was twenty-nine months, and the average cargo of oil from the same ships was exceeding seventeen hundred barrels. But it should be observed, that the ships are now generally larger than they were formerly, the small ones being sold out of the fleet, as the whalers call their ships, or broken up from decay and age. The length of their voyage is naturally increasing, from the fact that our whalers are traversing new seas for the whale, sometimes doubling the Cape of Good Hope, and taking an eastern direction, meeting their brethren of the same pursuits, who have doubled Cape Horn, while the latter sail over the ground in an opposite direction, which the former had just traversed.

The crews of these ships, I found from general inquiry and a close inspection of their log books and journals, are remarkably healthy. What sickness they have is from the scurvy, a disease incident to long voyages, and which is avoided only by the utmost care and the frequent use of fresh provisions. The whaling ships are provisioned with beef, pork, and bread, for three years; but they never exceed three months on their whaling ground without recruiting themselves with fresh provisions from some neighboring island. The utmost care is taken in fitting out these ships with many delicacies; and it is a general remark among whalers, that they live better at sea than on shore. Tea, coffee, and chocolate are freely used as anti-scorbutics. These vessels are navigated with the utmost caution. Two men are constantly placed at mast-head as sentinels: for many of the islands, rocks, and reefs are not laid down in any chart; and those laid down or not are many of them so low, that this precaution is indispensably necessary for their safety. From this precaution, many rocks, reefs, and islands have been discovered by them, and pretty accurately noted. The whalers are much advanced in mathematics and

practical navigation beyond other navigators : for, on their long voyages out and home, the most intelligent officers assist the younger in their mathematical and nautical studies ; and thus schooled, all come home improved in their branches, distinction in them being the direct road to preferment. The scarcity of the whale on the common whaling ground may be easily accounted for, when it is understood that it takes about ninety whales, as they average, to make a full cargo, and that from this calculation our own whalers take about eight thousand a year, and, from a moderate calculation, more than two thousand are mortally wounded that cannot be taken, making ten thousand a year destroyed by us. I have stated these particulars to show how necessary it will be to explore new grounds in higher southern latitudes for the right whale, when the sperm whale become scarce in the equatorial regions. And, from the accounts I have received, there is an immense extent of ocean in the high southern latitude westward, of which there is no account given ; and, if there be any, but little more is known than this, that the geographer has marked it on his maps and charts with a sweeping hand, to fill up the mighty space of which the world is as yet ignorant, and will long remain so, if the enterprise of our Government does not explore it.

I shall now proceed to give you a list of the discoveries of our enterprising and careful navigators in those seas, in as tabular a form as may be consistent with a clear view of the extent and importance of these discoveries. The English charts, and those of other countries, are as yet very imperfect. Much of their information has been obtained from loose accounts from whalers, who were careless in some instances, and forgetful in others, and which were seized with greediness by the makers of maps and charts, in order to be the first to make these discoveries known. But perhaps it does not become us to be hypercritical upon other nations, as we have as yet no maps or charts of our own to compare with them.

From all the accounts I have received of the islands, reefs, rocks, &c. in these seas, I draw the inference that most of them are of volcanic origin, and have arisen, in the lapse of ages, in groups or single islands, as it has pleased the Great Creator of the Universe to call them into existence : and by the same great engine of nature they may be constantly changing.

The information I have collected, if not perfectly accurate, is certainly the most so that can be found. It has been drawn from purely original sources ; nothing has been received at second hand. I have examined the log books, journals, maps, and charts of the navigators themselves, and in most cases have questioned them personally. Many of these facts have been received from several quarters, and I have had opportunities to compare them with others that had been offered before. Nantucket often had confirmed the information from New Bedford, and vice versa. When the individuals were equally good in point of intelligence, and their statements in any way differed, I have given both accounts ; but if there was a decided difference in the intelligence of the authority, I have adopted that which was held in the most general estimation.

Some of those whom I have examined, whose voyages were of very recent date, or were connected with a train of remarkable facts, I have considered distinctly, and have given their statements as made to me verbally, or have taken extracts from their journals without placing their

discoveries under the general heads. Their brief statements of the most recent date will show most distinctly that the field for discoveries is still prolific, and that there will be a sufficiency of subjects in those seas to employ the enterprise of our country for many generations to come.

The currents have in many instances been given; and from all I could gather from the statements made to me, they are caused by the winds, rather than from any motion of the earth, and of course are perpetually varying in such a manner that but little reliance on the experience of any one can be placed. The variations of the needle I did not find noticed by many of the navigators. Captain Swain, of Newport, has noted the variations in some latitudes, which will be given in this report. There is one fact worthy of remarking, which I obtained from the most experienced navigators, which is, that in all their voyages round Cape Horn, from the first commencement of their entering the Pacific until the present day, not a single vessel has been wrecked or lost in doubling the Cape; and these navigators sail from home whenever they are ready, without the least regard to the season of the year: still, however, all agree that March and April are the best months to double the Cape, as fresh gales are then frequent without dangerous storms. I noticed, from their log books and journals, that they reach the most dangerous parts of the Cape navigation in about ninety or one hundred days from our shores.

ISLANDS AND REEFS.

	North latitude.	West longitude.	
Galago island -	1° 48'	104° 06'	Not on the charts. The centre of Fanning's island lies in 3° 52' north, and 158° 56' west, by lunar observation and chronometer. It is a Lagoon island, the land about five feet above the surface of the water. Cocoa trees, 60 or 70 feet in height, are on it. The remains of a stone hut, about 12 feet square, and in it human bones, stone hatchets, and black-fish teeth, with holes drilled thro' them. Some parts of the land had been cultivated, as appeared by the gardens, fences of stone, &c., remaining. The island is about 40 miles in circumference, the mouth of the harbor 30 rods in width on the south side; soundings going in, from 3 to 7 fathoms. There is a good harbor under the eastern point. The Lion was lost on a reef which makes off to the south from the entrance of the harbor, on the starboard hand going in. The tide ebbs and flows about 5 feet, and in its strength runs 6 to 7 knots out and in. Deep water all round the land close in. About 90 miles distant is Washington's island.
Fanning's do.	3 49	158 29	
By others 3° 44' and 159° 6'; also, 3° 50' and 158° 45'.			
Washington's island.	4 30	126	
By others 4° 50' and 160° 30'.			
Island -	6 36	166	
Barber's island	8 54	178	
Also 8° 33' and 177° 59'			
Reef -	10	179 24	Not on the charts.
Clipperton's rock, low island.	10 28	109 19	
Island -	11 33	164	Not on the charts.
Do. } proba-	13 06	168 24	
Do. } bly the	13 06	166	
Do. } same.	13 19	168 55	

ISLANDS AND REEFS—Continued.

	North latitude.	West longitude.	
Shoal - -	14° 44'	170° 30'	
Do. 13° 32'			
same long.			
Gaspar's island	15	176 18	On the charts, in 176° 18' east.
By some in E. long.			
Island - -	16	133	
A cluster, from	16 to 17	& 133 to	133°.
Roca coral -	16 12	136 12	
Island - -	16 15	133 30	
Do. - -	16 30	163 54	
Do. - -	17	136	
New Blada -	18 12	114 03	Probably Cloud's island.
Island - -	18 22	155 15	The situation given this island is only about 40 miles southeasterly from the most southern point of Owhyhee—doubtful.
Shoal - -	18 22	170 30	Not on the charts.
Clarion's island, plenty of wood.	18 23	114 45	Another situation for Cloud's isl- and.
Island - -	19 15	166 52	Perhaps another situation for Mal- lon's island, which is found on the charts.
Do. fresh wa- ter.	19 22	115 15	See Cloud's island, 2 lines below.
Mallon's island	19 23	165 23	
Cloud's do. -	19 46	115	See above. So many different sit- uations are assigned to an island or islands in this neighborhood, that it would seem desirable that the true latitude and longitude should be accurately determined. There are, in fact, two islands on the charts, near this situation.
Copper do. -	20 06	131 54	Placed on the charts in east longi- tude.
Island - -	21	176 30	Near Krusenstern's rock, which is placed on the charts in lat. 22° 05', long. 175° 40'.
Shaler's island	22 06	112 14	Not on charts—doubtful.
Massachusetts island.	22 28	177 05	Placed on the charts in 28° 30' N. 176° 40' W.
Henderson's isl- and, fresh water.	24 06	128 30	Not on charts. By others in 24 26'.
Reef, shoal -	24 14	168 35	Two Brothers lost on it.

ISLANDS AND REEFS—Continued.

	North latitude.	West longitude.	
Pollard's island	24° 48'	168°	
Gardner's do.	25 03	167 40	
Cooper's do.	25 04	131 26	
Maro's reef -	25 24	170 12	
By others 25° 48' and 170° 52'; also, 25° 28' and 170° 20'.			
Island - -	25 22	131 26	A repetition of Cooper's island.
Laysan's island	25 50	171 51	
Also 26° 2' and 173° 40'.			
Group, Pearl & Hermes, Brit- ish whalers, lost in 1822	27 46	176 or 176° 30'	
Bunker's island	28	173 30	
Island - -	28	176 50	
Cure's island, low and dan- gerous.	28 25	178 42	
Swift's island, (Otter island.)	33	119 06	
New Nantucket	11	176 20	Not on charts.
St. Berto island, wood & water.	18	110	
Island - -	13 06	168 24	
Reef - -	3 28	157 59	
Shoal - -	13 38	170 30	
Island - -	13 05	168 21	Same as third above.
Do. - -	20	151 30	Not on charts.
Wake's island -	16 49	169 40	Here wrong placed.
Shoal - -	13 36	170 30	
Ann's island -	13 05	168 21	
Weeks's reef -	16 49	169 40	See third line above.
	North latitude.	East longitude.	
Reef - -	1°	179° 34'	
Strong's island	5 23	163 10	An island, called Teyoa, is placed on the charts in latitude 6° N. 162° 35' E.
Group - -	9 05	164 37	A group of islands is found on the charts, in the same latitude, 166° E.
Catherine isl'nd	9 08	166 10	

ISLANDS AND REEFS—Continued.

	North latitude.	East longitude.	
Aricief's island	9° 18'	161° 18'	Island de Arresites is found on the charts in lat. 10° N., long. 160° 30' E., and the island Casbobas 9° 40' and 161° 50' E.
Reef - -	10	179 24	This reef is placed, in a preceding part of the list, in 179° 24' W. Not on charts.
Island - -	16	171 42	
Cornwallis's island.	16 48	169 22	
Tarquin island	17	160	Not on charts.
Folger's do. -	18 22	155 15	Not on charts.
Granger's do. -	18 58	146 14	
Reef - -	17 06	156 14	
Halcyon island, wood.	19 06	163 33	
Weeks's or Wilson's island.	19 21	166 55	Wake's island.
Island - -	20 30	152 50	Reef on chart.
Lamira - -	20 30	166 42	Placed on chart in 164° 15'.
Reef - -	21 05	136 48	
Peru island -	21 12	141 42	
Reef - -	22 07	142 24	
Dexter's island	23 24	163 05	
Marcus island -	24 18	153 42	Probably Island de Sebastian Lobos, placed on chart about 55 miles to the north, same longitude. Probably same as preceding.
Island discovered by R. Weeks.	24	154	
Island - -	25 12	131 36	A rock "seen by Capt. Bishop, in 1796," is placed on the charts in lat. 25° 20' N., long. 131° 55' E. Not on the charts.
Reef - -	25 30	152 50	
Forbes's island	25 42	131 13	
Island - -	25 53	131 17	
Do. - -	26 05	131 52	
Lasker's island	26	173 24	Reef on chart.
Reef - -	26 06	160	Not on chart.
Tree island -	26	145 44	Placed on the charts, lat. 27° to 27° 30' N., same longitude.
Island - -	28 30	176 50	Perhaps Massachusetts, here wrongly placed in east instead of west longitude.
Galunus island-	28 53	162	

ISLANDS AND REEFS—Continued.

	North latitude.	East longitude.	
Island - -	29° 26'	143°	} Three of these islands are on the charts, and another, St. Tomas, in lat. 30° 20', long. 142° 20'.
Do. - -	29 40	143 06	
Do. - -	30	143	
Do. - -	30	144 24	
Do. - -	30	141 30	
Ganges island -	30 45	154 25	An island is on the charts, in lat. 31°, long. 155°; no doubt intended for the same.
Do. - -	31	147 10	Not on charts.
Reef discovered by R. Weeks.	31 15	153	This reef is placed on the charts in lat. 33°, same longitude.
Island - -	31 30	140	Not on charts.
Reef, near - -	32	147	Not on charts.
Roca di Plata -	33 48	160 48	Roca di Plata is found on the charts in lat. 32° 30' N., long. 170° E.
Bank 64 fathoms.	34 25	178 30	Mellish's bank.
Starbuck's group.	-	173 30	No latitude given.
Reef - -	-	-	N. E. from Robert's island, (one of the Marquesas,) distant 21 miles; 6 miles long from N. E. to S. W.
Magus shoal -	23 22	130 11	Not on charts.
Reef - -	1	178 24	On charts, but placed in 179° 24'. See also forward, 13th item, where the same longitude is given.
Reef - -	20 30	152 50	
Island - -	17	176 50	Not on chart.
Talsam's island	9 30	166 45	Not on chart.
Reef - -	2 30	158 60	Not on chart.
Island - -	21 15	145 48	Not on chart.
Rock - -	31 09	138 29	Not on chart, (doubtful.) See 10th item forward.
Island - -	30 33	139 36	Very near the situation of Todos los Santos on the charts.
Abyos island -	23 22	130 11	The same latitude and longitude as given (in the 9th item preceding) to Magus shoal. Abajo island or shoal is found on the charts in lat. 20° 20', long. 130° 10'.
Reef seen by Captain Trask.	2 40	178 50	Not on charts.
Reef - -	2 30	153 50	Not on charts.

ISLANDS AND REEFS—Continued.

	North latitude.	East longitude.	
Island -	21° 15'	145° 48'	Same island given in the 6th article preceding.
Reef -	22 12	142 42	
Do. -	1	179 24	
Three islands -	26. 06	145 44	See Tree island, preceding.
Rock -	31 42	141 10	Not on charts.
Do. -	31 09	139 29	Not on charts. See 9th item preceding. Todos los Santos is placed on the charts in lat. 30° 45', long. 139° 22'.
Spartan island	1 10	159 30	Not on charts.
Moore's island	30 S.	166 35	High land and well inhabited.
Reef -	-	-	30 miles from Palmire's island—very bad one. Longitude taken in a strong current.
	South latitude.	West longitude.	
Bunker's shoal	17'	160° 40'	
Island -	26	159 50	An island called Jarvis's island, and a shoal or reef seen by Captain E. Clark, are placed very near this situation on the charts.
Do. -	1 05	138 54	Not on charts.
Brock's island	1 13	159 30	
Clark's island	3	151 30	
Island -	3 14	170 50	Birney's island, in lat. 3° 20', long. 171° 30' W.; and Sidney's island, in lat. 4° 25', long. 171° 20' W., discovered by Captain Emmert, will be found on the charts.
Do. -	3 32	173 44	
Do. -	3 35	170 40	
Sidney's island	4 30	171 20	
Island -	3 57	154 20	Maldone's island, of Lord Byron, placed on the charts 155° W.
Reef -	5 30	175	Not on the charts.
Starbuck's island	5 40	155 53	
Loper's island	6 07	177 40	Not on the charts.
Island } proba-	6 32	167	An island is placed on the charts in
Do. } bly the	6 36	166	6° 36', long. 166°.
Do. } same.	6 45	160 48	
Island -	10 05	162 20	Reirson's island and Humphrey's
Do. -	10 30	161 28	island, discovered by Captain Patrickson in 1822, are placed on
Reef -	10 46	136 06	

ISLANDS AND REEFS—Continued.

	South latitude.	West longitude.	
Island -	11° 47'	162°	the charts in lat. 10° 30'—160° 55', and 10° 12'—160° 50'. A shoal is also laid down in lat 11°—165° 48', and an island in lat. 10° 55'—166° 00'.
Winslow island, inhab.	14 10	177 10	
Island -	15 38	161 18	Not on charts.
Do. -	15 47	161 14	Not on charts.
Do. -	16	139	Not on charts.
Do. -	16 28	143 30	
Do. -	17	138	
Do. -	20	167 30	
Macy's island -	20 52	178 47	} On chart with other names.
Elizabeth island	21 06	178 36	
Eunice's island	21 08	178 47	
Raratongo, inhab.	21 17	159 40	
Armstrong's island, inhab.	21 21	161 04	} Orurute island, (an inhabited island) is placed on the charts in lat. 21° 20' S., long. 160° W. No doubt the same.
Maria's island -	21 45	155 10	
Oeno island -	23 57	131 05	Not on chart.
			Laid down on the charts as discovered by Captain Bond, in long. 131° 35' W. Captain G. B. Worth found it in 23° 57' S., 131° 05' W., about 80 miles N. W. by N. of Pitcairn's island, with a dangerous reef extending from the south point.
Elizabeth island	24 06	127 50	
By others 24° 26', and in E. long.			
Anderson's isl'd	24 21	128 30	Probably the same as Elizabeth island, placed on chart in 24° 30', long. 128°.
Pilgrim's island	24 40	104 40	
Group -	25 12	130 30	If this group exists, it must be a few miles only south of Pitcairn's island. Very doubtful.
Gwinn's island	26 25	105 30	Another situation for Pilgrim's island.—Ya de Salas y de Gomes, of the charts.
Island -	28 06	95 12	Not on charts; doubtful.
Group -	31 06	129 30	Not on charts.
Rock -	51 51	64 42	Not in the Pacific.

ISLANDS AND REEFS—Continued.

	South latitude.	West longitude.	
Sidney's island	4° 29'	172° 17'	See page 10, where it is placed in 4° 30' and 171° 20'.
Cocoa nut island and reef.	18 12	174 15	Not on chart. If correctly placed, must be between Amagura and the Mayorga islands. See chart.
Mary Balcout's islands.	2 47	171 58	Surrounded by a reef 20 leagues in circumference, with only four openings where boats can enter.
Byron's island	1 10	175 40	Placed on the charts in 1° 10' S. and 177° 12' E. A reef on the north end, 2 miles distant.
Island -	20	167 30	
Clark's reef -	1 13	159 45	
Island -	21 29	131 28	Not on chart.
Shoal -	1 15	159	} Very near Clark's reef; probably the same.
Reef -	1 32	160	
Island -	11	162	} Very near the situation of Reirson's and Humphrey's islands. See page 10, and also account given by Capt. Coffin, of ship Ganges.
French island -	10 30	162 15	
Francis island -	10	161 45	
Reef -	1 15	159 42	Clark's reef. See above.
Island -	20	157 30	
Island -	20	161 30	
Falcon's island	21 17	159 40	
A large island -	19 56	140 16	
Do. round	18 36	141 30	Thirty miles north and south. An island called Sostanges, about 36 miles southwesterly of this, is placed on the charts, as discovered in 1823.
Starbuck's island	6 54	155 47	
Phenix island, small & sandy, 3 miles in cir- cumference.	2 35	171 39	} These two islands, with Mary Balcout's island, given before, in nearly the same latitude and longitude, are probably the same as Birney's island.
Barney's island, a lagoon, 20 miles in cir- cumference.	3 09	171 41	
Tworeefs -	-	-	
Independence island.	3 36	144 35	Bearing N. N. E. from Keppel's island, 28 miles, about a cable's length apart. Not on charts.

ISLANDS AND REEFS—Continued.

	South latitude.	West longitude.	
Sarah Ann -	4°	154° 18'	Probably the same as Maldone's island, placed on charts in 155°.
Fenua Laosa	W. N. W.	from	Mopelia about 60 miles.
Oroa, Gardner's island	4 30	174 22	Not on charts; discovered by Capt. Coffin, of ship Ganges.
Coffin's island	31 13	178 54	Not on charts; discovered by Capt. Coffin, as above.
Ganges island -	10 25	160 45	} On charts; seen by Capt. Coffin. Do. See Captain Coffin's printed account.
Do. -	10	161	
	South latitude.	East longitude.	
Nederlandich island.	7° 10'	177° 33'	Not on charts. See printed account.
Tracy's island	7 30	178 45	Not on charts.
Mitchell's group	9 06	179 48	
Plasket's island	9 18	179 50	Probably one of Mitchell's group.
Independence island.	10 25	179	Not on charts.
Island -	10 45	179 35	Not on charts.
Hunter's islands	15 31	176 11	
Reef (& 160° 14')	23 48	164 14	
Do. -	26 06	160	
Island -	31 19	160 42	
Reef -	26 06	160	Repetition of reef given above.
Do. -	21 15	160	
Island -	30 33	139 36	Inland, on New Holland.
Moore's island	30	166 35	See page 10, with Spartan island and reef.
An island, with plenty of wood and water.	from 1° N. to 2° S.	125 6	
Island -	30 06	144 24	
Do. -	29 31	143	
Do. -	31	155	
Lydney's shoal -	3 20	146 50	
Ocean island -	41	170 48	
Do. -	2 30	152 40	
Reef -	1 40	159 30	
Do. -	8 30	144 45	

ISLANDS AND REEFS—Continued.

	South latitude.	West longitude.	
An island -	21° 59'	131° 38'	Seen by O. Starbuck, N. W. from Marquesas.
Do. -	5 01	-	
Sherdoff's island	14 41	144 59	
Reef, very low	5 38	170 50	
Island -	4 45	174 40	
Do. -	14 15	138 47	
Reef and island	14 57	144 26	
Island -	14 41	144 59	
Jarvis's island -	23	160 15	
Malden island -	3 59	155	
Mante island -	20 08	157 18	
Starbuck's island	5 58	155 58	
Island -	28 06	94 12	
Do. -	9 57	149 30	
A rock -	-	-	Bearing from the Diego Ramirez, N. 73° E. 30 miles.
A rock -	31 24	177 55	
Island of Oratoa	20 14	159 45	Well inhabited.
Island -	19 56	158 12	
Do. -	20	157 15	
Rorotong island	23 06	157 55	
Remitara island	22 30	152 08	Inhabited.
Island -	15 50	155 05	
Do. -	8 35	159 40	
Do. -	20	156	
Do. -	20	156 40	
Do. -	22 32	152 09	
Do. -	21 18	159 36	Probably Falcon's, 21° 17', 159° 40'.
Do. -	21 28	161	
	North latitude.	East longitude.	
Helicon's island	22° 28'	177° 05'	
Gasper island -	15	176 18	
Reef -	2 30	153 50	
Island -	21 15	145 48	
Cooper's island	21 48	131 48	
Island -	3	144 24	
Rock -	31 42	136 29	
Island -	30 33	139 36	
Allegos island -	23 22	120	
Island -	1 07	155 10	
Do. -	2 46	154	

ISLANDS AND REEFS—Continued.

	North latitude.	East longitude.	
Island -	5° 18'	163° 12'	
Do. -	8 54	165 38	
Do. -	17	156 18	
Three rocks -	31 15	153 40	
	North latitude.	West longitude.	
Buckle's island	28°	178°	
Island -	21	176	
Golconda's isl'd	54	132	
Island -	1 06	139 05	
Burick's	15 15	146 46	A chain of islands so called; wood- ed.
Islands -	11 11	190 09	A chain, 25 miles from N. to S.
Ocean island -	28 25	177 42	
Allen's breakers	25 30	170 30	
Island -	28 05	95 12	
Mellish's bank -	34 25	181 31	64 fathoms.
Cloud's island -	19 46	115	
Lassion's island	26 02	173 35	
Island, low -	10 08	189 04	3 miles in length.
Group, largest Oteda.	9 28	189 44	
Island -	4 44	163 39	
New island -	19	133	
Wreck reef -	16 49	169 40	
Island -	30	178 30	
Do. -	16 30	169 45	
	North latitude.	East longitude.	
Massachusetts island.	30°	178° 30'	Mentioned in three or four other places, differently situated.
Island -	20 20	155 24	
Reef -	31 42	141	
3 islands, { from	25 58	145 28	
{ to	36 30	158	
Guardian isl'ds, three.	22 30	-	350 miles N. E. of Ono.
Incarnation of Quiros.	-	-	N. N. W. from Pitcairn's island, distant 90 miles.
Henderson's isl.	-	-	110 miles E. of Pitcairn's island, and 7 miles S.

ISLANDS AND REEFS—Continued.

	North latitude.	East longitude.	
Bowen's islands	26° 44'	143° 20'	Dangerous.
Group of small low islands.	4 43	169	In form of a horse-shoe, open at the N. N. E. side, with a harbor eight or ten miles over in the middle of the chain.
Group of low islands.	8 03	166 15	Covered with wood, and surround- ed with rocks and reefs; inhabited.
	South latitude.	West longitude.	
Ellis's group of islands.	8° 27'	118° 04'	
Depeyster's isl'd	8 05	181 45	
Island - -	14 15	138 47	
Romanzoff's isl'd	14 57	144 28	
Island, small -	26 40	104	
Island - -	26 32	103 59	Low, rocky, barren, two and a half miles long, by two in width, with a deep bay.

Captain Edmund Gardner, of New Bedford, having visited the Pacific Ocean (both north and south) several times, gave his opinion as to the coasts and islands which it would seem more immediately necessary to explore and survey, viz.

CALIFORNIA.

This coast has been very imperfectly surveyed, particularly from Ceros island, south, to the end of the peninsula. From Ceros island, north, was partially surveyed by Vancouver. There are, however, many bays, harbors, islands, and reefs, that were not laid down by him. There has lately been a reef discovered by Captain Pease, of the ship *Hesper*, of this port, in lat. 32° 34' N., long. 119° 34' W., which was not seen till the ship was passing over one end of it. It was seen from the mast-head, nearly under the ship. They sounded on it, and found from two and a half to sixteen fathoms.

Northwest to west-northwest from the Sandwich Islands, (a track much frequented by our whaling ships,) there are a number of islands and reefs but imperfectly known. In this direction three ships have been lost, viz. *Two Brothers*, of Nantucket, and *Hermes* and *Pearl*, of London. He should consider this track one of the first that should be explored.

The next that would call the attention of the expedition would, in his opinion, be a track, north and west, perhaps more north than west, from the Ladrone islands to the islands of Japan, a chain of islands extending nearly across in this direction, and the true situation of which is very little known.

South-southwest from South island, near the coast of Japan, Captain Clark, of the barque Elizabeth, of New Bedford, discovered a reef, lat. $31^{\circ} 45' N.$, long. $137^{\circ} 50' E.$, The Sisters, of London, in company at the time.

A rock, called the Haystack, said to lie in lat. $29^{\circ} 58' N.$, long. $137^{\circ} 50' E.$, has also been recently discovered. The latitude is possibly correct; the longitude is given differently by different navigators.

Extracts from the log book of Captain George Rule, of Nantucket.

——— Made an island he discovered in 1823, and named it Lydra island, lat. $11^{\circ} 48' S.$, long. $164^{\circ} 47' W.$ No inhabitants; plenty of wood and fish, but no water that he could find; not laid down in any chart they had; one and a half mile S. S. E. to N. N. W. in extent; a reef around it 100 rods from shore; no bottom 100 yards from the reef.

———, 1824. Made Friends' rock, bearing half compass W. half S., distance four leagues from above, at 1 A. M. At noon it bore S., distant twelve miles, lat. $31^{\circ} 23' S.$ Next day discovered a reef, upon which the sea breaks high, at first thought to be whales breathing. It bears from the Friends' rock N. W., distance about four leagues. Latitude, of reef, $31^{\circ} 15\frac{1}{2}'$; the day previous, the longitude, by chronometer, $177^{\circ} 50' W.$

Bonin islands have had a place on the charts for some time; but little, indeed nothing, was known of them, except that land had been reported in that neighborhood, and some map-maker put it down on his charts. They are regarded as new discoveries in Nantucket, made by Captain Coffin, 12th September, 1824, while he commanded the ship Transit, from Bristol. There is a freshness in the account he gives of them, that is really interesting; and he may with some justice claim the honor of the discovery, as they were not laid down on his charts. He found the group to consist of six islands, besides a number of large rocks and reefs. Captain Coffin sailed in the employ of Fisher, Kidd, & Fisher, and, in honor of his employers, called two of the islands by their names, the largest of which is four leagues in length. The one most southern of the group he called South island; and the fourth, from the great number of pigeons he found on it, he named Pigeon island. About four miles E. N. E. of South island, lie two round high islands, to which he gave no names. Fisher's island lies from S. S. E. to N. N. W., and Kidd island, the most western of the group, lies S. E. from the N. W. part of Fisher's island. Between the two last mentioned islands there is a beautiful clear bay, two miles wide, and five miles up to the head. Captain Coffin sailed up this bay about four miles, where he found a fine small bay, where he anchored his ship, and, as, he remarks, there is some justice due one's self, called it Coffin's harbor. This harbor is sheltered from all winds except from W. S. W., and a vessel will ride with as much safety as in Hampton Roads, with no current or swell. Captain Coffin

took fifty tons of water on board, of the purest kind, with a supply of wood, both of these essential articles being in any abundance, and more easily procured than at any other place he was at. Turtle and pigeons were so plenty that any number could be obtained. The water in the bay was stored with a variety of fish, and with plenty of choice lobsters, and the cabbage tree was among the productions of the island, so that any desirable quantity might be easily procured. Captain Coffin did not discover any quadruped, reptile, or insect, not even an ant. The islands are covered with large and beautiful forest trees, but not a single mark, even of a knife, could be traced upon one of them; nor did it appear that the footsteps of man had ever been imprinted on any of these islands. For whale ships, or those bound from Canton to Port Jackson, or the northwest coast of America, they will furnish a valuable place of refreshment. They are about south of Sandown point, on the coast of Japan, and the distance may be sailed in four days. The bay where Captain Coffin anchored is in latitude $26^{\circ} 30'$ north, longitude 141° east.

In the year 1825, the same captain, and while on the same cruise, discovered, in latitude 27° north, longitude $141^{\circ} 10'$ east, a high island, well wooded, from the west side of which he procured good turtle and wood. Six leagues north of this, he discovered a high lump of an island, and many small ones near it, with a dangerous reef extending from one island to the other, and as far as to latitude 28° north. These islands and reef were not laid down on his charts. The navigation of the ocean around, and particularly north of this group, is dangerous, from our imperfect knowledge of it.

From many inquiries made of Captain Macy, about the Loo Choo island, I am of opinion it will be found well worthy of more minute examination. It is situated in north latitude 26° , and 125° east longitude; is well cultivated; all kinds of refreshments may be procured, and a good harbor will probably be found on the southwest part. The inhabitants are peaceable, and seem disposed to form acquaintance, and establish friendly intercourse with foreigners. Vessels have seldom stopped at this island, and the world is yet ignorant of its inhabitants, their peculiarities, &c., except what information may be found in Captain Hall's book, royal navy.

Monmouth island, one of the Baske isles, is thickly inhabited, and well stocked with all kinds of provisions common to the islands in those latitudes. It affords good anchorage on the northeast part. The people on this island wear the Chinese costume, and appear very friendly, and anxious to trade with strangers. The island abounds with sheep; and there are many islands in its neighborhood, of more or less importance.

A cluster of islands, said to have been discovered in 1716, and laid down on most charts in latitude 35° north, and longitude 146° east, is now considered of doubtful existence. By Captain Coffin's log-book, he has frequently sailed and whaled over the very spot, without being able to see them from the mast-head.

The natives of "New Islands," and the surrounding groups, are generally well disposed, and willing to barter in all the productions of the islands. The group of islands between Francisco and Jida should be more attentively examined. Several of them are well peopled, and the inhabitants, like the Japanese, are reserved and distrustful of strangers.

From the S. E. part of New islands, there is a small island, well inhabited with curly haired people, who appeared a warlike race. This island affords a good harbor, and probably abounds with Beach le Mar.

Captain Richard Macy, of Nantucket, a very intelligent man, has long been engaged in the whale fishery, and has shown more than usual skill in his observations, as well in noting the facts he has seen, as in taking a great many sketches of islands, reefs, harbors, coasts, &c., which will be found very useful to the expedition. Captain Macy discovered an island four or five miles in extent, in south latitude 59° , and west longitude 91° , his ship passing near enough to see the breakers. The island abounded with sea-dogs, or seals, and the water was much colored, and thick with rockweed. While crossing the Pacific, on a return voyage, he passed between the latitudes 50° and 55° south, and found the water much colored, abounding with rockweed and seals—conclusive indications that land was near; but he could not stop to make any researches. He mentions the following islands, reefs, and shoals, as deserving particular attention. Some of them, it is true, are laid down on the charts, some are not, and all require nearly the same examination. It is not at all surprising that the positions of these islands are not well defined. Their places were often given from observations, without making any allowance for refraction, and from the run of the log, without knowing or stopping to ascertain the direction and velocity of currents. One island, without any name, in $15^{\circ} 45'$ south, and longitude $154^{\circ} 15'$ west; one 16° south, 139° west, not well known; another island, 17° south, and 138° west, not named: one island, not laid down on any of the charts, nor published in any list of newly discovered islands, lies in 16° south, and 143° west.

Phillips's island, discovered on his late passage, in $11^{\circ} 20'$ south, and $148^{\circ} 50'$ west, is very low and dangerous, and cannot be seen but at a short distance; lying in the track of our homeward bound ships, between the Sandwich and Society Islands. A few small shrubs and trees are on this island, but no inhabitants.

In latitude $5^{\circ} 30'$ south, and longitude $155^{\circ} 50'$ west, an island was discovered in 1826, of about five miles in length. It lies low in the water, and presents a coast as dangerous as a reef, as it cannot be seen any distance. This island could not be found on any charts, and is a new and interesting discovery, inasmuch as it is an island dangerous to vessels if not well known.

There are a dangerous reef, and some rocks, in the neighborhood of $190^{\circ} 50'$ south, and $167^{\circ} 30'$ west.

In June, 1825, an island was discovered, northwest from the Feejee islands, in latitude $15^{\circ} 30'$ south, and longitude $175^{\circ} 30'$ east. This island is not placed on any of the charts, is well inhabited, abounds in yams, and the natives are very friendly.

The island Rotunah is situated in about 12° south. This island has long been known, and deserves attention, as a place where all refreshments known to the South Seas can easily be procured.

Due west from this island, and about 15° south, there is a dangerous reef. Its extent and bearing is unknown, and it requires further attention.

Duke of York's island is laid down on the charts in $8^{\circ} 30'$ south, and

is said to be uninhabited. Captain Macy says he saw natives on it. This point should be settled, and I venture the prediction that the whaler is correct. The island contains refreshments.

Savage island. The natives are warlike; great caution necessary in landing.

Wytootach and Navigator's islands, all contain refreshments, abound in hogs, and the natives are noted for their passionate fondness for large blue beads.

There is an island sixty miles west from the above, and also a reef, the former not inhabited, nor laid down on the charts.

Some islands have lately been discovered, extending from 169° to 172° east, and from 30° to 1° south. These are not named, nor placed on any chart, nor included in any list of newly discovered islands.

In the year 1827, Captain Macy discovered a small group of islands in latitude 6° north, and 153° east. This group he called by the name of the ship he commanded, the *Harvest*. The islands are all enclosed by a reef, and abound in trees. He did not land, nor does he know if they are inhabited.

In latitude 9° north, and from $150^{\circ} 30'$ to 152° east, there is a chain of islands, fifteen in number. Some of them are ten miles apart, but are enclosed by one reef, ninety miles in extent. These islands are low and beautiful, entirely covered with cocoa nut trees. He did not land, but thinks them inhabited.

Captain Macy visited another group of islands in $7^{\circ} 40'$ north, longitude 144° east. Some of them are well inhabited, but not marked on the charts.

St. Andrew's islands, per charts, are sixty miles out of the way. Laid down, $5^{\circ} 20'$ north latitude, $131^{\circ} 20'$ east longitude. True position, $5^{\circ} 20'$ north latitude, $132^{\circ} 20'$ east longitude.

Disappointment island is placed on the charts in latitude $27^{\circ} 30'$ north, longitude $139^{\circ} 20'$ east. True position, $27^{\circ} 30'$ north latitude, $139^{\circ} 55'$ east longitude.

Armstrong's island was discovered in 1824, and is situated in latitude $21^{\circ} 21'$ south, and longitude $161^{\circ} 04'$ west. This island is fertile, well peopled, and affords a good anchorage to the north, and abounds in refreshments. The natives had never been visited before, nor had they any knowledge of civilized people. They were timid, and much alarmed at the approach of the vessels, showing no hostile appearances. The captain landed with a boat, when the fears of the natives soon subsided, and they gathered round him in great numbers. They would not allow him to move or walk a step, but carried him wherever he wished to go. They regarded him as a superior grade of being, and paid him every homage they knew how. The number of inhabitants is unknown, and the island has never been visited since its discovery.

In Captain Macy's last voyage but one, he discovered a group of islands, eleven in number. They are many miles apart, and all surrounded by a coral reef, situated in 9° north, and $164^{\circ} 40'$ east. Several of them are well inhabited by dark and savage looking fellows, although they behaved very well, came off in their boats and bartered cocoa nuts. Captain Macy did not land, nor is it probable the island has ever been landed on by any other ship's crew. The reef enclosing the group is very dangerous, extending, in some places, fifteen miles from the land.

Broom's range affords a good place for wooding.

Lord Howe's group is inaccurately laid down.

There is a bank, latitude 36° north, longitude 179° east, on which some whalers have sounded, but no one knows its extent and bearings.

Captain Coffin, as stated by Captain Macy, discovered a reef in latitude 32° north, and longitude 140° east.

Sixty miles southwest from Ohituo is a newly discovered island, thickly inhabited by very friendly natives. Refreshments may be procured at it in any quantity, and good anchorage found.

The same captain, in the year 1824, discovered a group consisting of three islands, in latitude 21° north, longitude 179° west. The islands are ten miles apart: many inhabitants are seen on them, but he did not land, or hold any communication with them, nor is it probable they were ever visited.

Ceno island, in $23^{\circ} 50'$ south, $130^{\circ} 15'$ west, not laid down on the charts, unless it be on some of the late editions.

A group of islands in latitude $31^{\circ} 06'$ north, and longitude $129^{\circ} 30'$ east, is not accurate on the charts, and the islands are not named.

A number of reefs, situated about 27° south, and longitude 160° east, are dangerous, and should be examined. One more in 24° south, and $164^{\circ} 30'$ east. A dangerous rock somewhere about $27^{\circ} 30'$ south, and longitude $130^{\circ} 30'$ east.

From the Marquesas to 20° south and to at least 20° north, and from 150° west to 150° east, is a portion of the globe where all our intelligent captains of whale ships agree many important discoveries may yet be made. Within these limits, there are many islands, reefs, and shoals, not discovered, and many but partially known.

Captain John Gardner, of the ship *Atlantic*, reports the following discoveries, which he made while on his last voyage in the Pacific:

The first island, in north latitude $8^{\circ} 48'$, longitude $144^{\circ} 35'$ E.

The second do. do. $1^{\circ} 07'$ do. $165^{\circ} 00'$ E.

The third do. a cluster S. lat. $2^{\circ} 15'$ do. $152^{\circ} 05'$ E.

Also, a cluster of reefs and shoals, extending N. N. E. and S. S. W. between the latitudes of $1^{\circ} 35'$ and $2^{\circ} 15'$ south, and longitude $153^{\circ} 45'$ and $153^{\circ} 15'$ east.

John Weeks, second officer, saw an island in 2° north, longitude 150° east, one mile long, surrounded by a coral reef six miles from shore. This island is low, and abounds in cocoa nuts.

Captain George Washington Gardner discovered the following islands, &c. which are not laid down on any of the charts:

An island, north latitude $30^{\circ} 00'$, east longitude $144^{\circ} 00'$

One ditto, do. 39 do. 39

Do. do. 30 do. 44 20

Rocks, do. 31 do. 155

An island, do. 37 do.

On the coast of New Albion,

An island, north latitude $33^{\circ} 00'$, west longitude $119^{\circ} 30'$

Do. do. $21^{\circ} 55'$ do. 155 10

Maria island, not on the charts, abounds with fish and wood, but no water; is low and dangerous.

A rock, in latitude 20° south, longitude $167^{\circ} 45'$ west, not on charts, nor any published list; dangerous shoals in the neighborhood.

Palmyra island is in $5^{\circ} 58'$ north, and $162^{\circ} 30'$ west longitude. There is a dangerous reef 30 miles north, extending E. N. E. and W. N. W., very narrow, and fifteen miles in length.

Captain R. Joy, of Nantucket, reports a harbor, in latitude 45° south, in West Patagonia, in which he found good and safe anchorage. By proper surveys, he thinks it might be made a place of refreshments for our whale ships.

I have generally remarked that all our seamen, who have had occasion to touch at any point on the west of Patagonia, agree that the coast should be surveyed from Cape Horn to Cape Pilaes. They have often been sealing on the islands around this coast, and all agree that very little reliance can be placed, by the mariner, in the accuracy of the charts in common use. The shores, in many places, are so bold, that a vessel may be made fast to the trees growing on the land.

Sidney's islands vary, on different charts, from $4^{\circ} 50'$ to $5^{\circ} 30'$. The northernmost is in latitude 3° , and longitude, according to Arrowsmith's charts, $176^{\circ} 50'$. The islands are very numerous; some are very small, from two to three acres, others larger, and one twenty miles in extent.

Again, the captains who have visited Fanning's island say it affords a good harbor, of four or five fathoms water, and abounds in wood and water, both easily procured. The island is found, by charts, in latitude $3^{\circ} 48'$ north, and longitude $158^{\circ} 40'$ west. Good fish in the harbor and around the island, and peppergrass on the island, good for the scurvy.

The Kingsmills group, lying 1° south, and $175^{\circ} 30'$ east, consists of a number of beautiful islands, all thickly inhabited. A steady current sets westerly from this group.

Captain Joy discovered a barren island and a reef in 23° north, and $177^{\circ} 15'$ west, which has never been surveyed.

Wake's island, mentioned in the above list, in $19^{\circ} 20'$ north, and $166^{\circ} 50'$ east, affords wood in abundance; no water discovered on it, but probably may be found by examining the island.

In 1825 there was an island discovered by the captain of the ship *Spartan*, which bears the name of the ship (of Nantucket.) It lies low in the water, and is in latitude $1^{\circ} 16'$ south, and $159^{\circ} 30'$ east.

In latitude $1^{\circ} 30'$ south, and longitude $166^{\circ} 35'$ east, there is an island lately discovered. It lies high, and is well watered, and is called Morris's island. This island lies near the track of Captain Butler, in 1794, and is S. W. from Pleasant island.

An American gentleman, in a letter from Valparaiso, dated the 10th of April, 1828, to the editor of the *Salem Register*, gives an account of an island which he considers a new discovery. In this supposition he is correct; but it was first discovered by Captain Ray, of Nantucket, in the year 1825. It lies in $26^{\circ} 32'$ south, and longitude $103^{\circ} 59'$ west. The nearest land to it is Easter island, in latitude 27° south, and longitude $109^{\circ} 46'$ west.

Captain R. Closly says he never saw but one island inhabited, and not laid down on his chart; and this was in latitude $8^{\circ} 03'$ north, and $166^{\circ} 15'$ east. It is a small, low island covered with wood, and is not to be found on Purdy's large and late edition of charts of the world, published in 1827.

In latitude $10^{\circ} 30'$ north, and east longitude $166^{\circ} 40'$, the same captain

discovered a large group of islands surrounded by many insulated rocks and reefs, and no inhabitants.

Captain Worth informed me that Grigan island, found on all the charts north by west of the Ladrões, is worthy of some notice. Fresh water may be had at it, by digging wells near the southwest side of the island, within a few feet of the beach. Plenty of firewood of good quality may be had. Natural productions, cocoa nuts, bread fruit, yams, &c. are found. There is no sounding until near the shore; but, in case of necessity, a vessel may anchor in from 12 to 50 fathoms water; dark grey sand on the southwest side. There is a volcano in the middle of the island.

Captain Bennett laid down an island in $5^{\circ} 30'$ north, longitude $139^{\circ} 20'$ west. This is near Fanning's island. He called it Madison island.

St. Pert's island. Against the name of this island, Captain Bennett has marked in his log-book, "wood and water." Its position is 18° north, longitude 116° west.

Captain Briggs discovered an island west and north of Sandwich Islands, in $25^{\circ} 47'$ north, longitude 172° west. The island is low, with not more than 60 feet in any part from the water, 3 miles long, and 2 across it.

Captain Edward Gardner, while in command of the whale ship *Bellona*, discovered an island in 1823, in latitude $19^{\circ} 15'$ north, longitude $166^{\circ} 32'$ east, which he judged was 20 or 25 miles long. A reef appeared to make off from the east end of it, to the distance of 2 miles, with detached rocks to the west. The situation given is from the centre of the island. "Wake's island" is placed on Arrowsmith's and other charts nearly in the above situation. The island was covered with wood, having a very green and rural appearance.

The island to which Captain Seely proposes to give the name of Beverly island, was probably not, as he supposed, a new discovery. On Purdy's smaller charts of the world, published in 1821, as well as on the previous edition of that chart, an island is laid down in $18^{\circ} 30'$ north, longitude $113^{\circ} 30'$ west, to which he gives the name of "St. Rosa;" and, though the longitude differs considerably, I am disposed to believe it is the island Captain S. describes. It is not laid down on Arrowsmith's charts; and it is a little remarkable that, in Purdy's edition of his large charts, published in 1821, and improved in 1825, it is not to be found. Nor has Bowditch any reference to it in his tables of latitudes and longitudes. The island has been seen by some others of our whalers who have cruised in that neighborhood; and Captain Swain, late of the ship *Charles*, ran near it, and made the longitude $113^{\circ} 30'$ west, the same as given in Purdy's former maps.

On some old charts, I perceived an island laid down in the same parallel of latitude, and about 120° west longitude, but which is not found in the best modern charts.

Captain Swain, while passing from Sandwich Islands to Cape Horn, ran farther south than usual for whale ships, and discovered an island in latitude 59° south, and longitude 90° west, covered with snow, and abounding with sea-dogs and fowls. This must be the same island discovered by Captain Macy, an account of which is given before; and this is only introduced to show how practical men tell their plain stories, and, without any previous concert, confirm each other.

Captain H. Bunker, in 1823, discovered an island in $15^{\circ} 30'$ north, and 136° west longitude. Lying to windward, and it blowing strong, he could not get to it to make any observations.

In the same year he landed on an island in $24^{\circ} 22'$ north, longitude $153^{\circ} 18'$ east, by reckoning, not being able to make an observation that day; nor has he visited or heard of the island since.

Captain H. C. Bunker, about 3 years ago, discovered an island not on his charts; it is called by the natives Pearotuah, is 3 miles from east to west, about 20 miles in circumference, high, mountainous, rocky, and rugged, free from all dangers around it, with two boat harbors, one northwest of the other, on the northwest side; the land productive. The missionaries had visited it, and Mr. Williams was on it at the time. The natives are estimated at 5,000 in number. It is in latitude $21^{\circ} 17'$ south, and longitude $159^{\circ} 40'$ west. There is no trace of this island on Purdy's charts to the latest editions.

Captain S. Chase, of Nantucket, on one of his late voyages, fell in with a canoe containing a number of natives, S. S. W. from the Kings-mills group. They had lost their track, but pointed in the direction they thought they came from. Captain Chase steered to that point, and found the island where they belonged. On going ashore, the islanders gathered round them in great numbers, and conducted Captain Chase to the residence of their chief, who treated him with great kindness, and loaded his boat with fresh provisions. Captain Chase is of opinion that the island had never been visited before, and states it to be a good place for recruiting. The latitude and longitude are not given, nor have I been able to find them among any of the records in Nantucket; the captain, at present, being on a whaling voyage in the Pacific.

Penrhyn's island. On Arrowsmith's charts this island is laid down in lat. $9^{\circ} 14'$ S. long. $167^{\circ} 48'$ W., which, by a comparison with Captain Alexander Macy's journal, kept during his late voyage in the ship *Peruvian*, is probably erroneously given on the charts, or Captain Macy has discovered a new island.

On the 21st of July, 1827, Captain Macy discovered land, bearing from W. S. W. to S. by W. 12 miles distant, his ship then heading S. by E. On the following day he saw two other islands, or prominent parts of the island seen the day before, with valleys intervening, (which was probably the fact, as no water could be perceived between them,) lying to the S. and W., the nearest part at four miles distance. This island was well wooded, and found to be inhabited. At 3 P. M. a canoe with five natives, of large stature and ferocious countenances, well armed with spears and clubs, came under the stern of the *Peruvian*, and remained there nearly an hour. Soon after many other canoes were at the leeward, paddling in a direction as though their object was to intercept the course of the ship. The manœuvres of the natives appeared so hostile, that Captain Macy made all sail off shore, and at dark saw canoes in chase of the vessel, which, however, they did not succeed in overtaking. Captain Macy supposes, from the appearance of the natives, and the few articles he saw in the canoe which visited the ship, that they have never had any intercourse with, or knowledge of, civilized people. The latitude of the island is $8^{\circ} 52'$ S. long. $157^{\circ} 23'$ W. Whether this be a new island or not, is a subject of curious inquiry; and certain it is, our knowledge of it is very imperfect.

From the account given by Captain Allen, the dangerous reef of rocks near Cape St. Roque is erroneously laid down on the charts. He experienced moderate weather while in the neighborhood of the island, which subjected his vessel to a strong westerly current, causing her to fall to leeward of the port about 90 miles of latitude. May 24th, land was seen W. S. W. and W. 20 miles, latitude, by observation, $5^{\circ} 24' S.$ Stood in, and at the distance of 10 miles from land tacked off, being 24 miles south of Cape shoals, by the chart. Observed the day following $5^{\circ} 25' S.$, and stood in towards the S. W. and W. S. W., working to windward; and, $4\frac{1}{2}$ hours after, with my position, as per chart, 25 miles south of the shoals, the prominent headlands being precisely as the day before, and judging the same distance off, (10 miles,) while in the act of veering, the vessel struck on the reef, bilged, and filled in three hours; proving, according to my observation, and information subsequently obtained on shore, that the shoals were placed on the chart erroneously 25 to 30 miles: latitude by chart 5° , their true latitude $5^{\circ} 25'$ to $5^{\circ} 30'$. The Cape is also erroneously laid down, authors differing from $5^{\circ} 03'$ to $5^{\circ} 34' S.$ The latest edition of the "American Coast Pilot" places them nearly in their true position.

Captain M. Hart, on a late trading voyage from New York to the Northwest Coast, from thence to Canton, and back to New York, via the Sandwich Islands, embraced every opportunity in his power to obtain the true position of islands, shoals, rocks, reefs, &c., and the accuracy with which they are laid down in the charts in common use. The general correctness of his observations, I think, may be relied on, as he is a man of considerable science, of great experience, had on board two good chronometers, and was, besides, well versed in the use of lunar observations. In lat. $15^{\circ} 30' N.$ and long. $123^{\circ} 20' W.$ are laid down the dangerous rocks called "Villa Robos." Captain Hart sailed over the very spot, and saw nothing of them. They no doubt exist somewhere in the neighborhood, and should be looked after, and their position accurately defined. On all the published charts the island "Gaspar Rico" is laid down in $15^{\circ} N.$ lat. and $172^{\circ} E.$ long. Smith's island, and also St. Bartholomew's, have the same latitude, and 170° and $164^{\circ} E.$ long. Captain Hart run for these islands, tacked several times, had a number of good observations, and decided to his entire satisfaction that they are not to be found within fifty miles of their positions given on the charts. The island "Pagon" is laid down 25 miles too far to the north. The third Volcano island could not be found in the latitude and longitude given by some navigators. Captain H. run for the island "Tres Colunas," and came to in lat. $27^{\circ} N.$ and $160^{\circ} E.$ long., the very position given this island, and, with a clear atmosphere, he could not discover land in any direction from the mast-head, and with the best of glasses. Of course, this island does not exist, or is inaccurately laid down on the charts. "Gold island" is not laid down correctly, as land was not in sight in $29^{\circ} 30' N.$ and $151^{\circ} 30' E.$, the position given on all the large charts.

The information I have thus far communicated has been derived chiefly from our citizens engaged or interested in the whale fishery. I regret that I am not at liberty to communicate in writing all the interesting facts which I have been enabled to collect from those engaged in the seal

trade, or, as they call it, the "skinning business." The occupation of these men leads them into seas and parts of the globe far beyond the common pathway of the whaler. Their voyages and adventures, too, are of the most daring kind. In small vessels they venture into high southern latitudes, and have actually taken seal, with profit, in some instances, within the south antarctic circle. In the history of the seal trade, secrecy in what they know, has been deemed a part, and a very important part, too, of their capital. There is nothing more common at this time, than that islands are frequented for animal fur, and their positions known to no one on board but the captain; and when an island is discovered, the observations are made and noted down by the captain in his private journal.

In frequent and familiar conversations with these practical men, who have spent so many years of their lives in these high latitudes, I have been enabled to draw out a great deal of information in relation to the manner of conducting a vessel with safety through the ice, and the proper season of the year to make the attempt to reach high latitudes, with a world of useful hints, and observations of a kindred nature. These I do not deem it necessary to give in detail, but have recorded them in my private notes for future use. I have also been enabled to ascertain, with a good deal of precision, the portion of the southern hemisphere where these attempts to reach a high latitude have always proved ineffectual. And they have communicated to me, also, where their experience has fully shown that vessels may advance with no great difficulty into very high latitudes, if not to the 90th degree itself. From all which, as well as from answers received to a circular letter addressed to many whom I could not see, I have been enabled to make the following estimate:

That they have been beyond 70° S. latitude in a few instances, in which latitude they experienced moderate weather, a clear sea, and no land or ice to the south. They all agree that the ice to be met with is first formed and attached to land, and that the greatest impediment to navigation from ice will be found from 62° to 68° S., except in those meridians where they have not been able to go far south at any time. They have seen lands to the east of the Shetlands, but give no account of any animal or vegetable productions on any of them.

The southern part of the New South Shetlands extends farther than any one has yet penetrated. The shores are bold, and in many places afford spacious harbors, which look as if they might extend far into land, like Hudson's or Baffin's Bay.

In latitude 63° S., and 63° W. longitude, from the island Pisgah, our sealers have sailed along a high and rugged coast, tending S. W. to 75° W. longitude, and 66° S. latitude. Captain Pendleton, of Stonington, Connecticut, one of the most practical and intelligent sealers I met with, and who has spent many years in the South Sea fur trade, is strongly of opinion that there are many valuable discoveries to be made in the seas southwest of the Shetlands. The quality of the ice, nature of the currents, &c., make his conjecture highly probable.

The island Deception abounds with volcanoes; and there are several places where a man may stand on ice and snow, and cook his dinner in water that boils a few feet below him. On the northern part of Palmer's land, and in latitude 66° S., and about 63° W. longitude, Captain Pendle-

ton discovered a bay, clear of ice, into which he run for a great distance, but did not ascertain its full extent south. In those seas the prevailing winds are from W. N. W. to W. S. W., and all gales from northeast. A gale seldom continues more than six hours. Clear weather from S. S. W. and S. S. E., which is not many days in a month.

Captain Pendleton relates a curious fact of Deception island. The middle of the island has been thrown up entirely by internal fires and volcanic eruptions, until the main body of the island has disappeared. In one place the melted lava ran into the ocean, leaving a passage of 15 fathoms water, over which he passed with his vessel into the centre of the island, which had the appearance of an immense bowl. He sounded without being able to find bottom.

Captain Morrill, who sailed from this city (New York) on a sealing voyage, while he commanded the brig *Wasp*, between the years 1822 and 1825, sailed between the latitude of $59^{\circ} 30'$ and $69^{\circ} 15'$ south, from 117° east to 110° west longitude; discovered several islands, and saw many indications of land, but had not time to run for it. On the meridian 46° west, he fell in with land, and coasted it from $60^{\circ} 47'$ to 71° south, and does not know how much further it extends.

The captains who have sailed within the Straits of Magellan, all report that, if properly surveyed, it would become the principal passage to the Pacific Ocean. They state that the snow storms are not frequent, nor of long duration, to the south, and generally come with E. N. E. and S. S. E. winds. Currents, among the Shetlands, mostly set N. E. at $1\frac{1}{2}$ and 2 miles an hour.

Captain James C. Swain states that he has been several times in the Pacific Ocean, and found the best time to double the Cape in March and April, as then the winds are most variable, and the weather the most pleasant, with but now and then some rain and hail. The highest point of south latitude he made was $59^{\circ} 18'$, long. $67^{\circ} 20'$ W., being then 95 days out. The snow storms lasted but a short time in that latitude. Short passages are made by keeping near the land. On the 5th of April he saw birds in lat. $56^{\circ} 20'$, long. 80° W. The birds were small, and could not have flown far. From the appearance of the water, and from the driftwood, as well as from the birds, he conjectured that land was not far off. He crossed the equator on the 24th of June, in long. $115^{\circ} 22'$, when the variation was 5 degrees easterly. In lat. $7^{\circ} 09'$ N., long. $121^{\circ} 25'$ W., the variation was $5^{\circ} 45'$. In lat. 11° N., long. $123^{\circ} 55'$ W., and from thence to long. 129° , and to lat. $18^{\circ} 22'$, he saw driftwood, and imagined that land was near. From $33^{\circ} 28'$ N. lat. and on $144^{\circ} 50'$ W. long. to 153° , the variation was about 10 degrees. He says, it does not answer to come from high to low latitudes until October. In lat. $23^{\circ} 25'$ S., long. $52^{\circ} 50'$ W., he saw an island, called by the natives "Remat." It appeared to be about 15 miles in circumference, not then laid down in any chart. The inhabitants mild and peaceable; the land low, and the productions the same as the Friendly Islands.

Much other and more minute information has been given me respecting the mode of doing business in the whale fishery by the gentlemen I have consulted; as, also, the number and nature of their losses, with all the facts they have in their possession in regard to those ships now missing, which may enable the expedition to use the best methods of extend-

ing to these unfortunate people assistance, if they are within the reach of aid. But these matters, fully written out, would extend my communication to an unwarrantable length. Enough has already been given of what I have collected, to show how much remains to be done in that portion of the globe; and enough also, to prove to the department that it is in possession of more information of those seas than the Admiralty of any other nation, however commercial, for those seas are truly our field of fame. Too much credit cannot be given to our whalers, sealers, and traffickers in those seas for the information they have acquired, and the liberality, generally speaking, with which they have imparted it. But, after all their exertions, justice to ourselves as a great people requires that this mass of information should be reviewed, analyzed, classified, and preserved in careful literary labors for the benefit of mankind.

That this may be accomplished in your administration of the marine of our country, and under your auspices and especial care, to the satisfaction of the public, and the honor of our country, is my ardent wish. It is a desideratum for which I have labored, and am ready to labor while my arm has a sinew or my heart a pulse.

Very respectfully,

Your obedient servant,

J. N. REYNOLDS.

CITY OF NEW YORK, *September 24, 1828.*